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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/821,025	03/19/97	BIJL H	246152006900

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HM22/0128

EXAMINER  
MARX, I

ART UNIT	PAPER NUMBER
1651	13

DATE MAILED: 01/28/99

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

08/821,025

Applicant(s)

Bijl et al.

Examiner

Irene Marx

Group Art Unit

1651



☒ Responsive to communication(s) filed on Dec 18, 1998

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-39 is/are pending in the application.

Of the above, claim(s) 1-26 and 34-36 is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 27-33 and 37-39 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

The amendment filed 12/18/98 is acknowledged. Claims 27-33 and 37-39 are being considered on the merits.

Claims 27-33 and 37-39 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

No basis or support is found in the present specification for a preparation of "dead" fungi or fungal cells. There is no indication found that applicant intended to kill the cells in the drying, granulation and/or extrusion process. Applicants suggest where cell death might occur. With respect to pasteurization, this step is not clearly indicated to be required in the as filed specification.

Therefore, this material raises the issue of new matter and should be deleted.

Claims 27-33 and 37-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27 is confusing in the recitation "obtainable" with respect to "extrusion of fungal biomass". Is a product-by-process intended? The claim is internally inconsistent in the recitation in the preamble of a "microbial exudate" and its production by extruding fungal biomass.

Claim 30 is vague, indefinite and confusing in the recitation "dried granules derived from a microbial biomass which have been dried and have...". The recitation of "derived" in this context is ambiguous, since it is unclear whether a physical, physiological or chemical derivation process

is intended. Are the granules dried or is the biomass dried. How are the granules dried? In claim 31 are the granules extruded after drying or before?

In claims 33 and 38, there is no clear distinction between granular particles and granules. They have the same dimensions and appear to have identical properties.

Claims 32 and 37 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 27, 29, 30-32 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Rhodes *et al.* for the reasons as stated in the last Office action and the further reasons below.

The claims are drawn to a dried, granular, fungal biomass, which can be extruded.

Rhodes *et al.* disclose fungal biomass which comprises dried, extruded granules. See e.g., Examples. From Table III it can be presumed that the average dry matter content is at least 30% and can be greater than 80%.

Applicants' arguments have been fully considered but they are not deemed to be persuasive.

In response to applicants' arguments that the dried, extruded granules of Rhodes are "required to live in order to sporulate and then kill insects", it must be remembered that the claimed compositions recite the open language "comprises". Therefore live cells are not excluded.

Moreover, the dried, extruded granules of Rhodes are reasonably likely to comprise at least a few dead fungal cells therein.

Therefore the rejection is deemed proper and it is adhered to.

Claims 28-33 and 30-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes *et al.* taken with Huang *et al.*, Barclay and Kyle for the reasons as stated in the last Office action and the further reasons below.

Applicants' arguments have been fully considered but they are not deemed to be persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, contrary to applicants arguments, the references are clearly in the same field of endeavor and deal with dried fungal biomass as uses thereof.

As to the cited *In re Rouffet* slip decision, it can be distinguished from the instant situation in that it pertains to a comparison between the applied art and the invention **as claimed**, which is not the case here. Also, inasmuch as each of Rhodes *et al.* and Huang disclose fungal biomass which comprises dried, extruded granules their teachings are deemed to very eminently relevant to the invention as claimed. These references are clearly directed to the same field of endeavor, i.e., dried

fungal biomass granules or extruded materials.. Applicants argue that the material of Rhodes *et al.* is of necessity alive, and that the cited reference is not directed to the extraction of compounds from fungal cell granules. Will all due respect, it must be noted that the present invention as claimed is not directed to the extraction of compounds from fungal cell granules and that there is no indication or claim designation for **all** of the cells to be dead. Clearly the preparation of Rhodes comprises dead and live cells. Applicants' <sup>arguments</sup> are not relevant to the composition "comprising" dead material as alleged. Moreover, that Huang teaches a preparation intended to mimic meat does not detract from its teachings of a preparation of fungal biomass having an average dry matter content of 30-70% which constitutes dried extruded fungal products (See, e.g., Abstract and col. 3, lines 11-15). The extruded product of Example 1 appears to have the required dimensions (col. 6, lines 50-57).

Kyle and Barclay, references directed to dried fungal biomass, are relied upon for their teachings of dried biomass of *Mortierella*. The product of Barclay is a dried product which comprises microbial biomass containing about 70% dry matter, which is granulated and/or extruded (See, e.g., col. 33, lines 1-3). The products contain unsaturated fatty acids which can be extracted.

Applicant has argued and discussed the references individually without clearly addressing the combined teachings. It must be remembered that the references are relied upon in combination and are not meant to be considered separately as in a vacuum. It is the combination of all of the cited and relied upon references which make up the state of the art with regard to the claimed invention. Applicant's claimed invention fails to patentably distinguish over the state of the art represented by the references.

Therefore the rejection is deemed proper and it is adhered to.

No claim is allowed.


Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irene Marx whose telephone number is (703) 308-2922.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn, can be reached on (703) 308-4743. The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196 .

  
Irene Marx  
Primary Examiner  
Art Unit 1651